

Notre Dame School  
Heliopolis



مدرسة  
نوتردام مصر الجديدة

# Sciences

## First Term

### 4 primary

الاسم: .....

الفصل: .....



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هذا العمل حصري على موقع زاكروولي التعليمي ولا يسمح بنشره في أي مواقع أخرى  
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## Science Copybook

## Unit (1)

## Lesson (1)

## Define

**Matter :** anything has mass and volume .

**Mass :** the amount of matter in an object .

**Volume :** the space occupied by matter .

## Complete :

- 1- Everything that occupies a space and has mass is known as .....
- 2- Matter has ..... and .....
- 3- Anything occupies ..... and has mass is known as .....
- 4- The space occupied by matter is called .....

## Scientific term :

- 1- It is the amount of matter that object contains .
- 2- It is the occupied space by matter .
- 3- It occupies a space and has mass .

## G.R.F :

- 1- Air is matter .

-

- 2- water has volume .

-



	unit	Tool	Example
1-length	cm m km	Ruler Graduated tape	book Room Distance between Cairo & Alex
2- mass	gm kg ton	sensitive balance common balance	Gold – chemicals vegetables heavy rocks
3 - volume	cm <sup>3</sup> m <sup>3</sup> ml , liter	ruler graduated cylinder	liquids cube stone

## Complete:

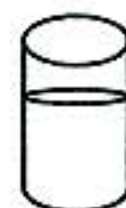
- 1- ..... are the measuring tool used to measure the mass of chemicals .
- 2- ..... and ..... are the units that measure the length of any object .
- 3- ..... is the tool that measures the mass of any object .
- 4- Graduated cylinder is used to measure the volume of ..... and .....

## Scientific term :

- 1- Tool measures the dimensions of your room .
- 2- Tool measures the mass of vegetables and cheese .
- 3- Unit used to measure the length of your pencil .

TO FIND the volume of any liquid :

the volume of liquid = 70 cm<sup>3</sup>



70cm<sup>3</sup>

find the volume of water , if the recorded reading of water = 24 cm<sup>3</sup>.

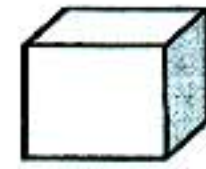


TO FIND the volume of regular solid :

Length = 8cm

Width = 2cm

Height = 3cm



The volume of cube =  $L \times W \times H$

$$= 8 \times 2 \times 3$$

$$= 48 \text{ cm}^3$$

Find the volume of cuboid , where its length = 10 cm , width = 1 cm , height = 4 cm .

TO FIND the volume of irregular solid :

$$V_1 = 20 \text{ cm}^3$$

$$V_2 = 40 \text{ cm}^3$$

The volume of irregular solid =  $V_2 - V_1$

$$= 40 - 20$$

$$= 20 \text{ cm}^3$$

Find the volume of each stone , where water rises up from  $10 \text{ cm}^3$  to  $30 \text{ cm}^3$  on placing the 2 stones in it .

$$1 \text{ KM} = 1000 \text{ m}$$

$$1 \text{ M} = 100 \text{ cm}$$

$$1 \text{ Ton} = 1000 \text{ kg}$$

$$1 \text{ kg} = 1000 \text{ g}$$

$$1 \text{ liter} = 1000 \text{ ml} = 1000 \text{ cm}^3$$



Complete :

- 1- 1 kg = ..... gm
- 2- 2 kg = ..... gm
- 3- 1000 gm = .....kg
- 4- 2000 gm = .....kg
- 5- 1 liter = .....  $\text{cm}^3$
- 6- 1000  $\text{cm}^3$  = ..... liter
- 7- 2 liter = ..... ml

The relation between volume and mass of matter :

Equal volumes of different substances have different masses .

Complete :

- 1- Metallic ball and wooden ball of the same volume have ..... masses .
- 2- 10 ml of milk and 10 ml of water have ..... masses .



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## Questions on lesson (1)

Choose :

- 1- The space occupied by matter is known as ( length , volume , mass )
- 2- Air has ( mass only , volume only , mass and volume )
- 3- Cheese has ( mass only , volume only , mass and volume )
- 4- ( graduated cylinder , sensitive balance , graduated ruler ) is the measuring tool that measures length of any object .
- 5- ( cm , kg , gm ) is one of the measuring units that estimate length of any object .
- 6- 5 m = ( 200 , 500 , 5 ) cm .
- 7- 1000 kg = ( 2 ton , 1 ton , 1000 gm ) .
- 8- The jeweler uses ( graduated ruler , 2 pan balance , sensitive balance ) to estimate the mass of jewellery .
- 9- The dimensions of your science book are 5 , 3 , and 2 cm , so the volume of the book = ( 150 , 30 , 100 ) cm<sup>3</sup>.
- 10- We can determine the volume of irregular small stone by using ( common balance , sensitive balance , graduated cylinder )

Put ( v ) or ( x ) :

- 1- Volume is the amount of the material that the object contains .
- 2- Salt has a volume .
- 3- Cm and gm are the measuring units of length .
- 4- Cm is the measuring unit of large length .
- 5- Graduated tape and measuring ruler is used in measuring length .
- 6- Common balance is the measuring unit of volume .
- 7- To determine the volume of cuboid of iron is estimated by measuring its length only .
- 8- Graduated ruler is used to determine the volume of irregular small stone .
- 9- The mass of 1 liter of water = 1 liter of milk .
- 10- 1 km = 100 meters



## Scientific term :

- 1- Everything that occupies a space and has a mass .
- 2- The amount of matter that object contains .
- 3- It is the space that is occupied by the object .
- 4- Tools used to measure length of objects .
- 5- A unit used to measure small length as length of pencil .
- 6- Tool used to measure mass of gold , silver and chemicals .
- 7- A device used to estimate the volume of liquids or any irregular solid body .
- 8- Length x width x height .
- 9- Measuring units of the volume of liquids .
- 10- A unit used to measure mass of vegetables and fruits .

## Complete :

- 1- Matter has ..... and .....
- 2- Matter occupies a ..... and has mass .
- 3- ..... Is the amount of matter that object contains .
- 4- Measuring tape is used to measure .....
- 5- Meter is the unit for measuring .....
- 6- Common balance is a tool for measuring .....
- 7- Liter unit is used to measure the ..... of liquid .
- 8- When we put an amount of a liquid in a graduated cylinder , the reading of the cylinder indicates .....of the liquid .
- 9- ..... is the tool that is used to estimate the volume of an irregular piece of rock , while ..... is the tool that used to estimate the mass of very light objects .
- 10- The volume of the book can be calculated by multiplying .....X.....X.....

## Give reason for :

- 1- Air is matter .
- 2- Water has volume .



What will happen :

Placing stone in a full cup of water .

Problems

1- Find volume of water

- volume of water = .....  $\text{cm}^3$

The accurate measuring to read the volume of water is recorded horizontally & at lower meniscus point.

2- Find the volume of cube

Length = 10 cm

width = 1 cm

height = 5 cm

3- a graduated cylinder contains  $100 \text{ cm}^3$  of water 4 equal sized marbles were put in it , the level of water became  $120 \text{ cm}^3$  .

Find the volume of each marble

4- Find the volume of 2 stones , then find volume of each one , where the volume of water =  $20 \text{ cm}^3$  and when 2 stones are placed in the water , it rises up to  $100 \text{ cm}^3$  .



5- Find the volume of marble , if the volume of spilled water =  $20 \text{ cm}^3$  .

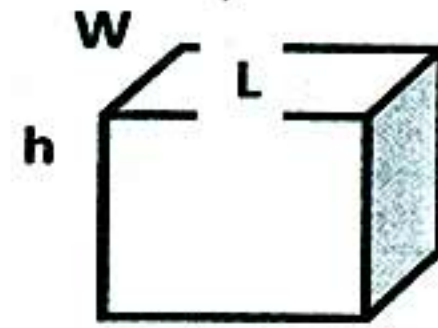
6- Find volume of 3 marbles , where volume of spilled water =  $30 \text{ cm}^3$

7- Find the volume of cube

Length = 20 cm

Height = half length

Width = 2cm



اكتب ذاكرولي في البحث وانضم لجروبات ذاكرولي  
مع رياض الأطفال للصف الثالث الاعدادي



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## Lesson (2)

## Matter states and its changes

Solid :

Definite shape

Definite volume

Liquid :

Indefinite shape

Definite volume

Gas :

Indefinite shape

Indefinite volume

Complete :

- 1- solid has definite ..... and .....
- 2- .....and ..... have definite volumes
- 3- ..... and ..... have indefinite shape .
- 4- ..... and ..... take the shape of containers.
- 5- ..... has definite volume , but has no definite shape .

Scientific term :

- 1- State of matter can be pressed .
- 2- State of matter that doesn't have definite volume .
- 3- State of matter that has definite shape .



G.R.F :

1- Air is a gas .

-

2- water is liquid .

-

3- ice is solid .

-

4- alcohol has indefinite shape and definite volume ,.

-

What will happen :

1- Placing water in a container .

2- Placing gravels and water in the refinery .

3- Blowing different shapes of balloons .

Change of matter states :





1- Melting :

2- Condensation :

Complete :

- 1- ..... is a process where water is changed to ice .
- 2- ..... is a process where ice is melted .
- 3- ..... is the solid state of water .
- 4- ..... is the state of matter that is changed to water by cooling .
- 5- Water changes from ..... to ..... on increasing its temperature .

Scientific term :

- 1- Solid state of water vapour .
- 2- Gaseous state of water .
- 3- Process where water drops appear on the cover of tea pot from inside when water boils .

G.R.F :

- 1- Appearance of water drops on the cold surface of leaves of the trees .
- 2- Ice changes to water on leaving it in air .
- 3- Full Bottle of water is exploded on leaving it in freezer for 24 hours .



What will happen :

- 1- Placing bottle of water in freezer for 24 hours .
- 2- Leaving some water in air for long time .

### Questions on lesson (2)

Choose :

- 1- Matter states are existed in ( 1 -2 -3 ) states at normal room temperature .
- 2- The solid state of water is ( water vapour – water – ice )
- 3- ( solid – liquid – gaseous ) state has no definite shape , but it has definite volume .
- 4- On placing ( sugar – water – oxygen ) in a vessel , it takes the shape and volume of it .
- 5- The occurrence of water drops on the outer surface of iced bottle is due to ( evaporation – condensation – melting ) of water vapour in air .
- 6- On leaving bottle of water in the freezer for 24 hours , the water changes to ( water vapour – ice – water ) .
- 7- The volume of ice is ( larger –equal – smaller) than the volume of water.
- 8- On leaving water in air , the volume of water ( remains constant – decreases – increases ).
- 9- ( ice – water – water vapour ) takes the shape of the container only .
- 10-On placing ice from one vessel to another , its volume ( remains constant , increases , decreases ).



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Choose :

- 1- All of these substances have definite shapes and volumes except ( iron , water , wood )
- 2- Iron , wood and gold are examples of ( solid , liquid , gaseous ) matter .
- 3- Solid and liquid have definite ( shape , volume , shape and volume ) .
- 4- When water boils , it changes from ( solid to liquid , liquid to gas , gas to solid )
- 5- The change of matter from liquid state to solid state accompanied with ( increase in heat , decrease in heat )
- 6- ( freezing , melting , evaporation ) is the change of ice to water.
- 7- The solid state of water is ( ice , water , water vapour )
- 8- Solid state has definite ( shape only , volume only , shape and volume )
- 9- Water takes the ( shape , volume , shape and volume ) of the container.
- 10- Oil doesn't have ( definite , indefinite ) shape .

Complete :

- 1- ..... Can be pressed in cylinders .
- 2- Gravels can ..... from the refinery , because it has ..... Shape .
- 3- ..... is the gaseous state of water .
- 4- Volume of water ..... On leaving it in air .
- 5- ..... and ..... have definite volume .
- 6- ..... And ..... have indefinite shape .

G . R . F :

- 1- Salt is solid .
- 2- Oil is liquid .



3- Oxygen is a gas .

4- Butagas is compressed in cylinders .

5- ice changes to water on leaving it into air .

6- bottle shouldn't be full of water on placing it in the freezer .

What will happen :

1- Placing water in different shapes of containers .

2- Blowing air in different shapes of balloons .

3- Placing water in a a glass container .

4- Leaving a glass filled with ice in air for few minutes .

5- Placing a bottle of water in the freezer for 24 hours .



## Lesson (3)

## Elements around us

Element : metal and non metal

Define element :

It is the simplest form of matter

It is the smallest building unit of matter

It can't be decomposed into 2 substances or more

Complete :

- 1- ..... can't be analyzed into 2 substances or more .
- 2- Element is classified into ..... and .....

Scientific term :

It is the smallest building unit of matter.

Metals :

- 1- Shiny
- 2- Malleable
- 3- Good conductor of heat and electricity
- 4- High melting and boiling point
- 5- Ex. : solid : iron , gold  
Liquid : mercury



**Non metals :**

- 1- Not shiny
- 2- Not malleable
- 3- Bad conductor of heat and electricity
- 4- Low melting and boiling point
- 5- Ex. : solid : sulphur , carbon  
Liquid : bromine  
Gas : O<sub>2</sub> , N<sub>2</sub> , CO<sub>2</sub>

**Complete :**

- 1- ..... is liquid metal .
- 2- ..... is liquid non metal .
- 3- ..... is solid metal .
- 4- ..... is gaseous non metal .
- 5- ..... is non metal and good conductor of electricity .
- 6- ..... and ..... belongs to metals that are shiny and malleable .

**Scientific term :**

- 1- Solid non metal that is good conductor of electricity .
- 2- Element that is good conductor of electricity , but it is bad conductor of heat .
- 3- Element is from non metal and form of graphite .
- 4- Elements that can't be bent .

**G.R.F :**

- 1- Don't approach nail to an electric source .



2- Lamp is lighted on connecting it with coal and battery .

3- Phosphorus is broken on hammering it .

What will happen :

1- Connect sulphur to lamp and battery .

2- Hammering on gold and silver .

Uses of Elements :

- 1- Gold & silver → make jewels
- 2- Aluminum → make Aluminum foil , cooking tools
- 3- Copper → make statues & coins
- 4- Carbon ( Graphite ) → make (+) pole of battery
- 5- iron → make bridge, Door knobs , car chassis

Complete :

- 1- Cooking utensils are made of ..... that belongs to .....
- 2- Positive pole of dry cell is made of ..... which is from .....  
and form of .....
- 3- Car chassis is made from ..... because it is .....



Scientific term :

- 1- Element used to manufacture statues .
- 2- Element used to make rings and earrings .

G.R.F :

- 1- Bridges are made from iron .
- 2- Cooking pans are made from aluminium .

### Questions on lesson (3)

Complete :

- 1- ..... and ..... are used to make jewels .
- 2- ..... is the only non metal that is good conductor of electricity .
- 3- ..... belongs to metals , while ..... belongs to non metals .
- 4- Metals are characterized by ..... and .....
- 5- Non metals are characterized by ..... and .....
- 6- Sulphur and phosphorus belong to ..... , while lead and cobalt belong to .....
- 7- Bridges are made from .....
- 8- Nickel is from ..... , while wood and plastic are from .....
- 9- The group of elements that is malleable and ductile is known .....



Choose :

- 1- We use ( iron , gold , carbon ) in manufacturing statues and coins .
- 2- We use ( aluminium , copper , iron ) in manufacturing door knobs.
- 3- Poles of electric cells are made up of ( silver , sulphur , graphite )
- 4- All the materials you see in your environment are made up of ( non metals only , metals only , element )
- 5- The group of elements that have luster is known as ( metal , non metal )
- 6- The group of elements that is good conductor of electricity and heat is known as ( metal , non metal )
- 7- Electric wires are made up of ( aluminium , copper , iron )
- 8- Cooking utensils are made up of ( gold , copper , aluminium )

Give reason for :

- 1- Cooking pots are made from aluminium.
- 2- Positive pole of battery is made from carbon .
- 3- Gold and silver are used to make jewelry.
- 4- Don't approach nail to an electric source .
- 5- Bridges are made from iron and not gold .



What will happen :

- 1- Hammering on phosphorus .
- 2- Connecting lamp with battery and nickel .
- 3- Fixing wax on one the ends of iron bar , while the other end of the bar is exposed to the flame .

Scientific term :

- 1- Element that can be hammered .
- 2- It is classified into metal and non metal .
- 3- Element used to manufacture bridges , and door knobs .
- 4- Element used to manufacture coins and statues .
- 5- Non metal that is form of carbon .
- 6- Element belongs to non metal that is good conductor of electricity .
- 7- Shiny element that is used to manufacture jewels .
- 8- Non malleable element used to make positive pole of dry cell .
- 9- It is the simplest form of matter that can't be decomposed into 2 substances or more .
- 10-A group of elements having high melting and boiling point .



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## Lesson (4)

## Physical and chemical change of matter

## Define

## 1- Physical change :

Change in shape of matter and not in its structure ( same substance ):

## 2- Chemical change :

Change in shape and structure of matter ( new substance ).

## Complete :

- 1- ..... is the change in property of matter.
- 2- ..... is the change of matter in appearance only .

## Examples on physical and chemical change of matter :

Physical change of matter	Chemical change of matter
Cutting paper – paper recycling	Burning of paper
Bending iron	Rusting of iron
Dissolving sugar or salt in water	Food digestion
Grinding sugar	Adding yeast to dough
Ice cycle	Milk fermentation, fruit fermentation



**Complete :**

- 1- Rot of fruits is considered ..... change .
- 2- Burning of sugar is ..... change .
- 3- Fuel is ..... substance and its burning is ..... change .
- 4- Burning of paper producing ..... substance with ..... property .

**G.R.F :**

- 1- Combustion of sugar is chemical change .
- 2- Paper recycling is physical change .

**What will happen :**

- 1- Exposing iron to dry air .
- 2- Adding yeast to the pastry .

Question on lesson (4)

**Choose :**

- 1- Physical change is the change in ( shape only – property only – shape and property ) of the matter .
- 2- Chemical change is the change in ( substance – shape only – structure only ) with new property .
- 3- Melting of ice is a change in ( substance – structure – shape ) of the matter .
- 4- Heating and cooling water is ( chemical – physical ) change .



- 5- Combustion of fuel produces ( new – same ) substance with new ( shape only – structure only – shape and structure ) .
- 6- Leaving cup of water in the air for long time is an example on ( physical – chemical ) change .
- 7- The product that is resulted from adding sodium bicarbonate to vinegar is (  $N_2 - CO_2 - O_2$  ) .
- 8- Adding yeast to the pastry is an example on ( chemical – physical ) change..

Complete :

- 1- Combustion of sugar produces ..... substance , with .....structure which is considered ..... Change .
- 2- Cutting paper is ..... change , while burning paper is ..... Change .
- 3- Iron is reacted with ..... And ..... to produce ..... Which is a ..... substance with ..... Property.
- 4- The change that occurs to the food when it is digested inside the body is .....
- 5- Fruits fermentation produces ..... substance with ..... property , and considered ..... change .
- 6- Fermentation of milk is ..... change .
- 7- Physical change is defined as .....

Scientific term :

- 1- Change occurs to the iron on exposing it to wet air .
- 2- Change of matter in its appearance only .
- 3- Change that occurs to the dough on adding yeast to it .
- 4- Change of matter in its shape and appearance .
- 5- Change of matter with new shape forming the same substance .
- 6- Change that occurs to the iron on hammering it .



What is the type of change :

- 1- Forming sheets from iron .
- 2- Malleability of metals .
- 3- Making nails from iron .
- 4- Combustion of wood .
- 5- Milk fermentation .
- 6- Food digestion .

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تويتر  
واتس اب  
تليجرام

Give reason for :

- 1- Iron rusting is chemical change .
- 2- Ice cycle is physical change .
- 3- No change in the flavour of sugar on dissolving it in the water .
- 4- Sugar flavor changes on burning it .

What will happen :

- 1- Adding sodium bicarbonate to vinegar .
- 2- Adding yeast to the dough .
- 3- Exposing iron to dry air .
- 4- Placing shiny iron nail in a jar full of wet air .



Unit (2)  
Lesson(1)  
Stars and planets

**Stars :**

- 1- Shiny
- 2- Celestial body
- 3- Seen clearly at night in moonless sky
- 4- Seem small
- 5- Floats freely in the space
- 6- Different sizes

**Complete :**

- 1- Stars are ..... celestial bodies seen at ..... in ..... sky.
- 2- ..... are shiny that emit .....

**Scientific term :**

Shiny bodies freely floating in the vast vacuum .

**Sun :**

- 1- Only star in solar system
- 2- Medium sized star
- 3- Emits heat and light
- 4- Shiny celestial body
- 5- Central body in solar system
- 6- Biggest body in solar system
- 7- Seem biggest star to us
- 8- Fixed body



Scientific term :

- 1- Shiny celestial body located in the center of solar system .
- 2- It seems the biggest star to us , although it is medium sized star .

G.R.F :

- 1- sun seems the biggest star to us .
- 2- Sun is shiny body.
- 3- Sun is celestial body .

8 planets :

- 1- Dark celestial bodies
- 2- Rotates around sun in fixed circular orbit .

Put (v) or (x) :

8 planets are fixed bodies .

G.R.F :

8 planets are dark.

The characteristics of 8 planets :

- 1- Mercury : nearest planet to sun
- 2- Venus : most beautiful planet
- 3- Earth : we live on it
- 4- Mars : red planet
- 5- Jupiter : biggest planet



6- Saturn : surrounded by colored rings

7- Uranus : cold planet

8- Neptune : blue planet

Complete :

- 1- ..... is the cold planet , while ..... is the red planet .
- 2- ..... is the blue planet .

G.R.F :

1- Uranus is cold planet.

2- We live on earth .

Arrangement of 8 planets according to their distance from the sun :

G.R.F :

1- mercury is the nearest planet.

2- neptune is the farthest planet .

Complete :

- 1- ..... occupies the fifth position according to its distance from sun.
- 2- ..... occupies the first position according to its size ( from biggest to smallest )



**Moon :**

- 1- Dark celestial body .
- 2- Seems shiny .
- 3- Rotates around earth in fixed orbit .
- 4- Natural satellite of earth .

**G . R :**

- 1- Moon is the natural satellite of Earth .
- 2- Moon seems shiny .

**Complete :**

- 1- Moon spins around ..... in definite .....
- 2- ..... is the natural satellite of earth .

Question on lesson(1)

**Choose :**

- 1- Moon is moving celestial body as it ( rotates around sun – rotates around earth – freely floating in space ).
- 2- ( moon – asteroid – sun ) is the only star in the solar system .
- 3- Sun and stars are shiny as they ( emit – reflect – pass ) the light .
- 4- ( Jupiter – mars – Uranus ) is the fifth planet according to its distance from the sun .
- 5- Earth is the ( third – fourth – fifth ) nearest planet to the sun.
- 6- ( earth – Neptune – Uranus ) is known as the blue planet .
- 7- ( earth – Neptune – Uranus ) is the cold planet .
- 8- ( mars – Saturn – venus ) is surrounded by colored rings .

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## Scientific term :

- 1- It is the red planet .
- 2- It is the smallest planet .
- 3- They are the biggest bodies in the solar system .
- 4- It is the most beautiful planet in the solar system .
- 5- It occupies the first position according to its size ( from biggest to the smallest ) .
- 6- It is the farthest planet from the sun .
- 7- It is surrounded by colored rings .
- 8- They are the nearest 2 planets to uranus .
- 9- Shiny bodies seen at night in the sky .

## Complete :

- 1- ..... and ..... are the nearest two planets to earth.
- 2- Neptune rotates in the ..... orbit around the sun .
- 3- ..... Is the central body in the solar system .
- 4- All the celestial body are moving except .....
- 5- .....is the planet that occupies the third position according to its distance from the sun .
- 6- Sun , planets and stars are ..... bodies as they floats in the space .
- 7- ..... and ..... are dark bodies .
- 8- Mars is a planet as it is ..... Body .

## Give reason for :

- 1- Stars are shiny bodies .
- 2- Meteors and meteorites are considered celestial bodies .



3- Uranus is the cold planet .

4- Stars and sun have common properties .

5- We can live on earth .

Compare between :

Stars	Moon

What will happen :

1- No air or water on earth .

2- Absence of the sun .



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## Lesson (2)

## The rotation of sun and earth

All the celestial bodies are moving bodies except the sun which is fixed body .

Sun is fixed central body in the solar system . 8 planets rotate around the sun in definite circular orbit .

Moon rotates around earth in fixed circular orbit .

Complete :

- 1- ..... , ..... are moving celestial body except .....
- 2- ..... rotates around earth in ..... circular orbit , while ..... rotate around sun in definite ..... orbit .

Earth rotates around its axis :

- 1- Position of shadow of fixed objects change along the whole day .
- 2- Apparent sun rotation ( sun rises from east and sets to the west ) .
- 3- Sequence of day and night .

Earth rotates around sun :

Sequence of 4 seasons .

Choose :

- 1- Apparent sun rotation is due to the rotation of earth around ( sun , its axis , moon )
- 2- Rotation of earth around sun causes the sequence of ( day and night , 4 seasons , tide and ebb )



Give reason for :

- 1- Sequence of day and night .
- 2- Sequence of 4 seasons .
- 3- Shadow of trees changes its position along the day .

What will happen :

- 1- Earth rotates around its axis .
- 2- Earth doesn't rotate around its axis .

The part of earth that is forward to the sun is lighted ( day time ) , while the part of earth that is far from sun is dark ( night time ) .

Length of day = length of night ( in autumn and spring )

Length of day > length of night ( in summer )

Length of day < length of night ( in winter )

Complete :

- 1- In ..... , the number of hours of day is larger than of night .
- 2- In ..... , the number of hours of day is shorter than of night.

Note :

The summer day is longer than the winter day .



The sun takes different orbit from east to west .

Earth has 2 hemispheres ( northern hemisphere and southern hemisphere )

Complete :

In northern hemisphere , day is ..... than night if the northern hemisphere is forward the sun .

### Question on lesson (2)

Choose :

- 1- The sequence of 4 seasons is occurred due to rotation of earth around ( its axis , sun , moon )
- 2- The sequence of day and night is occurred due to rotation of earth around ( its axis , sun , stars )
- 3- The number of day hours are equal to the number of night hours in ( summer , winter , autumn )
- 4- Day length are bigger than night length in ( winter , summer , spring )
- 5- The part of earth that is forward to the sun is ( lighted , dark )
- 6- Egypt lies in ( northern , southern ) hemisphere .
- 7- If the number of hours of night = 13 and number of day hours = 11 , the season is ( winter , summer , autumn )
- 8- The part of earth that is far from the sun is ( lighted , dark )

Complete :

- 1- Stars and planets are travelling in .....
- 2- Moon is in continuous rotation around .....
- 3- ..... , ..... and ..... are known as celestial bodies .
- 4- ..... is one of the stars that seems larger than all other stars.
- 5- All the stars ..... freely in the sky except ..... which is fixed body .
- 6- Shadow of fixed bodies changes its position along the day due to rotation of ..... around .....
- 7- Apparent ..... rotation is due to rotation of ..... around sun .



8- Sun rises in ..... and sets to .....

9- Looking directly to the sun is ..... to your eyes .

Scientific term :

- 1- Phenomena occurs due to rotation of earth around its axis .
- 2- Phenomena occurs due to rotation of earth around sun .
- 3- Celestial body rotates around itself and sun in fixed circular path .
- 4- Fixed star that doesn't move in the space .

Give reason for :

- 1- Occurrence of Sequence of day and night phenomena .
- 2- Occurrence of sequence of 4 seasons phenomena .
- 3- Change the position of object shadow along the day .
- 4- Sun rises from east and sets to the west .

What will happen :

- 1- Earth rotates around itself .
- 2- Earth rotates around sun in definite orbit .
- 3- Axis of earth is vertical .



RevisionUnit 2Lesson 1Q. 1: Complete

1. Stars are ..... bodies that emit light & heat
2. .... bodies are the bodies that are found in the space.
3. .... is the largest body in the solar system.
4. .... is the largest planet in the solar system.
5. .... are shiny bodies freely floating in the vast vacuum.
6. .... emits heat & light.
7. .... is a fixed body that is located in the ..... Of the solar system.
8. .... is the central body in the solar system.
9. .... are seen clearly at night in mean less stay.
10. .... are dark bodies that spin around the sun.

Q. 2 Scientific team:

1. Celestial bodies float freely in the space.
2. It rotates around earth in circular orbit.
3. It is the nearest stat to us.
4. It is the hottest body in the solar system.
5. natural satellite of Earth.
6. Nearest planet to sun.
7. farthest planet from the sun.
8. Planet surrounded by colored rings.
9. Sphere where we live on.
10. Planet occupies fifth position according to its distance from the sun.



**Q. 3: G.R.F:**

1- 8 planets are dark

.....

2- Mean is a dark body, but it seems shiny.

.....

3- Sun & Stars are shiny bodies.

.....

4- Sun seems the biggest star to us.

.....

5- Sun, Means, & planets are celestial bodies.

.....

6- Moon is known as the natural satellite of earth.

.....

**Q.4: Mention the color of the following planets:**

1. Mars

2. Neptune

**Q. 5: Mention the characteristic of the following planet:**

1- Uranus

4- Saturn

2- Earth

5- Jupiter

3- Mercury

6- Venus

اكتب ذاكرولي في البحث وانضم لجروبات ذاكرولي  
مع رياض الأطفال للصف الثالث الاعدادي



نفوقه في أي عمل عليه العلامة دي



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RevisionUnit 2Lesson 2Q. 1: Complete

1. The earth rotates around ..... Every one day.
2. The Earth rotates around the sun once .....
3. The sun seems moving from east to west because .....
4. Day is longer than night in ..... while day is shorter than night in .....
5. The rotation of earth around its axis causes .....
6. The hours of day are not equal to the hours of night because the axis of the earth is .....
7. Hours of day are nearly equal to night in .....
8. The phenomenon occurs when the earth rotates around its axis called .....
9. The phenomenon occurs when the earth rotates around the sun is called .....
10. In ..... Night is longer than day

Give reason:

- The sun seems moving from east to west.  
.....
- The summer day is longer than the winter day.  
.....
- The movement of the shadow.  
.....
- Compare between the rotation of earth around itself and the rotation of earth around the sun.  
.....



**Write the scientific term:**

- 1- The season in which day equals night ( )
- 2- The time taken by the earth to complete on rotation around itself.  
( )
- 3- The time taken by the earth to complete one rotation around the sun.  
( )
- 4- A season where night time hours are longer than day time hours.  
( )
- 5- A phenomenon resulted from the rotation of earth around its axis.  
( )

**Put (✓) or (×)**

- The earth's axis is inclined and results in the sequence of day and night. ( )
- The direction of the apparent movement of the sun is from east to west. ( )
- The number of day hours and night hours are equal during autumn and summer. ( )
- The sequence of the four seasons takes place as a result of the earth's rotation around the sun. ( )
- Day is shorter than night during winter. ( )
- Shadow of trees changed its position along the day. ( )
- Axis of earth is vertical. ( )



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